Amendments to the Claims

1. *(Currently Amended)* An electronic device for cryptographic processing, comprising at least two electronic circuits (IC, CC, CP) coupled via a connection means, wherein the connection means is arranged for transferring data signals between the two electronic circuits, characterized by a monitoring circuit (401) arranged to monitor a deviation in the capacitance of the connection means and to generate an alert signal (411) if the deviation exceeds a predetermined value.

2. *(Original)* An electronic device for cryptographic processing according to claim 1, wherein the monitoring circuit is arranged to monitor the data signals transferred via the connection means and to compare a monitored signal with a reference signal.

3. *(Original)* An electronic device according to claim 1, wherein the electronic circuits comprise a logical circuit and a storage element arranged to store data output by the logical circuit.

4. *(Original)* An electronic device according to claim 2, wherein the monitoring circuit is a propagation delay detection circuit.

5. *(Original)* An electronic device according to claim 2, wherein the monitoring circuit is a slew-rate deviation detection circuit.

6. *(Original)* An electronic device according to claim 1, wherein the monitoring circuit is arranged to monitor a value of the capacitance of the connection means and to compare the monitored value with a reference value.

7. *(Original)* An electronic device according to claim 2, wherein the reference signal is derived from a Monte-Carlo analysis performed on the electronic device.

8. *(Currently Amended)* An electronic device according to claim 2, wherein the electronic device further comprises a dummy electronic circuit (405) having at

least a dummy connection means (409) with a capacitance comparable to that of the
connection means, and wherein the monitoring circuit is further arranged to determine
the reference signal by monitoring the dummy connection means when transferring a
data signal identical to that transferred via the connection means.

9. *(Original)* An electronic device according to claim 1, wherein the electronic
device is further arranged to use the alert signal to power down at least a part of the
electronic device.

10. *(Currently Amended)* A method for cryptographic processing, using an
electronic device comprising at least two electronic circuits (IC, CC, CP) coupled via
a connection means, comprising the step of transferring data signals between the two
electronic circuits via the connection means,
characterized in that the method further comprises the steps of:
- monitoring a deviation in the capacitance of the connection means
- generating an alert signal if the deviation exceeds a predetermined
value.